What is claimed is:

1. A compound represented by the following general formula (I):

[Chemical 1]

(wherein R is H, a functional molecule, or a protecting group and n represents an integer of 1 to 11).

- 2. The compound according to claim 1, wherein the functional molecule is one type or two or more types selected from a light-emitting molecule, light-dissipating molecule, membrane-permeating functional molecule, organselective functional molecule, bactericidal functional molecule, molecule-recognizing functional molecule, photocrosslinking functional molecule, photosensitizing functional molecule, DNA-bonding molecule and DNA-severing functional molecule.
- 3. The compound according to claim 2, wherein the functional molecule contains a light-emitting molecule and a membrane-permeating functional molecule, and the membrane-permeating functional molecule is a water-soluble amino acid.
- 4. The compound according to claim 2, wherein the functional molecule contains a light-emitting molecule and a light-dissipating molecule, and the light-emitting molecule is FITC, naphthalimide, flavin, FAM, rhodamine, TAMRA, ROX, pyrene or coumarine, and the light-dissipating

molecule is Dabcyl, HABA, NDI or Azo.

5. The compound according to claim 1, wherein R is selected from the group consisting of [Chemical 2]

6. A method for producing a compound represented by the following general formula (I):

[Chemical 3]

(wherein R represents H, a functional molecule or a protecting group, and n represents an integer of 1 to 11), wherein the aforementioned method contains one of the following steps a) through c):

a) a step of reacting a compound represented by the following general formula (II):

[Chemical 4]

(wherein n represents an integer of 1 to 11) with an active

ester derivative with OSu or OPfp of a functional molecule or an isothiocyanate derivative of a functional molecule;

b) a step of hydrolyzing a compound represented by the following general formula (III):

[Chemical 5]

(wherein R represents H, a functional molecule or a protecting group, and n represents an integer of 1 to 11); and,

c) a step of reacting a compound represented by the following general formula (IV):

[Chemical 6]

(wherein R represents H, a functional molecule or a protecting group, and n represents an integer of 1 to 11) with a compound represented by the following general formula (V).

[Chemical 7]

7. A method for producing a functional PNA oligomer comprising a step of substituting group R of a PNA oligomer to which is bonded one type or two or more types of a

compound represented by the following general formula (I): [Chemical 8]

(wherein R represents H, a functional molecule or a protecting group, and n represents an integer of 1 to 11) sequentially or simultaneously with a functional molecule.

4. The method according to claim 10, wherein R is selected from the group consisting of the following.

[Chemical 9]

- 9. The method according to claim 6 or 7, wherein the compound represented by general formula (I) is produced by one of the steps of the following a) through c):
- a) a step of reacting a compound represented by the following general formula (II):

[Chemical 10]

(wherein n represents an integer of 1 to 11) with an active ester derivative with OSu or OPfp of a functional molecule or an isothiocyanate derivative of a functional molecule;

b) a step of hydrolyzing a compound represented by the following general formula (III):

[Chemical 11]

(wherein R represents H, a functional molecule or a protecting group, and n represents an integer of 1 to 11); and,

c) a step of reacting a compound represented by the following general formula (IV):

[Chemical 12]

(wherein R represents H, a functional molecule or a protecting group, and n represents an integer of 1 to 11) with a compound represented by the following general formula (V).

[Chemical 13]

10. The method according to any of claims 10 to 12, wherein the functional molecule is one type or two or more types selected from a light-emitting molecule, light-dissipating molecule, membrane-permeating functional molecule, organ-selective functional molecule, bactericidal

functional molecule, molecule-recognizing functional molecule, photo-crosslinking functional molecule, photosensitizing functional molecule, DNA-bonding molecule and DNA-severing functional molecule.

- 11. The method according to claim 10, wherein the functional molecule contains a light-emitting molecule and a membrane-permeating functional molecule, and the membrane-permeating functional molecule is a water-soluble amino acid.
- 12. The method according to claim 10, wherein the functional molecule contains a light-emitting molecule and a light-dissipating molecule, and the light-emitting molecule is FITC, naphthalimide, flavin, FAM, rhodamine, TAMRA, ROX, pyrene or coumarine, and the light-dissipating molecule is Dabcyl, HABA, NDI or Azo.